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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR		ATTO	DRNEY DOCKET NO.	CONFIRMATION NO.		
10/650,574	10/650.574 08/28/2003		Sang-Ho Kim			5000-1-323	8249	
33942	7590	03/18/2005		1		EXAMINER		
	REITER, L			STEIN, JAMES D				
210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652						ART UNIT	PAPER NUMBER	
	,			2874				
			DATE	DATE MAIL ED: 02/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)	(2.)						
Office Action Summary		10/650,574	•	KIM ET AL.	Can						
		Examiner		Art Unit							
		James D. St		2874							
Period f	The MAILING DATE of this communication apports or Reply	pears on the c	over sheet with the c	orrespondence add	iress						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).											
Status											
1) 🔲	Responsive to communication(s) filed on	<u>.</u>									
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.										
3) 🗀	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.										
Disposit	tion of Claims										
5)□ 6)⊠ 7)⊠	Claim(s) 1-13 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1,2 and 9 is/are rejected.  Claim(s) 3-8 and 10-13 is/are objected to.  Claim(s) are subject to restriction and/or election requirement.										
Applicat	tion Papers										
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>28 August 2003</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The specification is objected to be specification to the specification is objected to be specification.	a)⊠ accepte drawing(s) be ction is required	held in abeyance. See if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFI	R 1.121(d).						
Priority	under 35 U.S.C. § 119										
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>											
Attachme			) [] Interview Over-	(DTO 442)							
2) Noti 3) Info	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		) Interview Summary Paper No(s)/Mail Da ) Notice of Informal P ) Other:	ate	-152)						

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by [USPAT 6,690,864] to Dee et al, which discloses a related optical fiber alignment system and method.

With regard to claim 1, Fig. 1 of Dee et al shows lower plate 32 in a horizontal orientation; a sliding table 34 mounted on the lower plate 32; an upper plate 38 and a jig 42 (chuck) disposed on the upper plate 38 and fixed to a rotational means chuck rotation drive 44 capable of rotation about the upper plate 30 for holding the optical fiber block (pigtail) 56. More specifically, "a fourth degree of freedom [is] controlled by a chuck rotation drive 44 provides for angular rotation  $\theta$  of the chuck about the z-axis (col. 2, line 52)."

With regard to claim 2, in addition to the rejection of claim1 previously discussed above, the rotational means 44 further comprises a rotational shaft passing through bearings 46 pressed into the upper plate 38.

Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by [USPAT 6,571,041] to Bourcier et al, which discloses a related device for aligning optical fibers with planar waveguides. Bourcier teaches optical alignment between optical elements along all three rotational axes: "The receptacle constrains the mounting platform to translation in a direction

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substantially perpendicular to the substantially planar surface and the mounting platform is configured so as to be free to *rotate about three orthogonal axes* within the receptacle. The optical element is coupled to the mounting platform. The optical element is aligned with a second optical element by selectively positioning the mounting platform (abstract and col. 4 line 67 – col. 5 line 1)." Alignment along three rotational axes, as taught by Bourcier, would inherently comprise alignment along the x, y and z rotational axes.

## Allowable Subject Matter

Claims 3-8, and 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the cited prior art discloses or suggests: the alignment apparatus as described above, further comprising a resilient means for providing a resilient force upon the sliding table in a direction opposed to the force applied to the sliding table when the optical fiber block comes into contact with the planar optical waveguide element; a method of aligning a planar optical waveguide element and an optical fiber block as described above with regard to claim 9, further comprising simultaneous alignment about the rotational x and y axes by providing a rotation shaft with a jig fixed thereon so that the jig may freely rotate as a horizontal force is applied to the jig.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: [USPAT 6,654,524] to Shekel et al and [USPAT 6,668,128] to Hattori et al, which disclose similar optical alignment devices.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Stein whose telephone number is (571) 272-2132. The examiner can normally be reached on M-F (8:00am-4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James D. Stein

Primary Examiner